1644

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RAW SEQUENCE LISTING
                                                                  DATE: 07/25/2000
                       PATENT APPLICATION: US/09/483,672A
                                                                    TIME: 14:32:13
                       Input Set : A:\42711cll.app
                       Output Set: N:\CRF3\07252000\I483672A.raw
       3 <110> APPLICANT: Xu, Jiangchun
               Dillon, Davin C.
               Mitcham, Jennifer L.
                                                                                  Does Not Comply
               Harlocker, Susan Louise
      6
               Jiang Yuqui
                                                                             Corrected Diskette Needed
      8
               Reed, Steven G.
               Kalos, Michael D.
     10
               Fanger, Gary R. Retter, Marc W.
     11
               Solk, John A.
Day, Craig H.
     12
     13
               Skeiky, Yasir A.W.
     14
     15
               Wang, Aijun
     Meagher, Madeleine
18 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
     19
              DIAGNOSIS OF PROSTATE CANCER
     21 <130> FILE REFERENCE: 210121.42711C11
C--> 23 <140> CURRENT APPLICATION NUMBER: US/09/483,672A
     24 <141> CURRENT FILING DATE: 2000-01-14
     26 <160> NUMBER OF SEQ ID NOS: 590
     28 <170> SOFTWARE: FastSEQ for Windows Version 3.0
ERRORED SEQUENCES
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     7202 <212> TYPE: PRT
     7203 <213> ORGANISM: Homo sapien
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     7208 Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe 7209 20 25 30
     7210 Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp 7211 35 40 45
           His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp 50 60
     7212
     7213
    7214 Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
7215 65 70 75 80
    7216 Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn 7217 85 90 95
```

7218 Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
7219 100 105 110
7220 Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
7221 115 120 125
7222 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His

DATE: 07/25/2000 TIME: 14:32:14 RAW SEQUENCE LISTING PATENT APPLICATION: US/09/483,672A

Input Set : A:\42711c11.app
Output Set: N:\CRF3\07252000\I483672A.raw

| 7223 |      | 130  |       |                |             |        | 135      |        |     |      |      | 140        | _    |       | <b>-</b> |        |
|------|------|------|-------|----------------|-------------|--------|----------|--------|-----|------|------|------------|------|-------|----------|--------|
| 7224 | Arg  | Ala  | Ala   | $\mathtt{Trp}$ | ${\tt Trp}$ |        | Lys      | Val    | Pro | Arg  |      | Asp        | Leu  | Ile   | Val      |        |
| 7225 | 145  |      |       |                |             | 150    |          |        |     |      | 155  |            |      |       |          | 160    |
| 7226 | Leu  | Arg  | Asp   | Thr            | Asp         | Val    | Asn      | Lys    | Lys | Asp  | Lys  | Gln        | Lys  | Arg   |          | Ala    |
| 7227 |      |      |       |                | 165         |        |          |        |     | 170  |      |            |      |       | 175      |        |
| 7228 | Leu  | His  | Leu   | Ala            | Ser         | Ala    | Asn      | Gly    | Asn | Ser  | Glu  | Val        | Va1  | Lys   | Leu      | Leu    |
| 7229 |      |      |       | 180            |             |        |          |        | 185 |      |      |            |      | 190   |          |        |
| 7230 | Leu  | Asp  | Arg   | Arq            | Cys         | Gln    | Leu      | Asn    | Val | Leu  | Asp  | Asn        | Lys  | Lys   | Arg      | Thr    |
| 7231 |      | -    | 195   | -              | -           |        |          | 200    |     |      |      |            | 205  |       |          |        |
| 7232 | Ala  | Leu  | Ile   | Lvs            | Ala         | Val    | Gln      | Cvs    | Gln | Glu  | Asp  | Glu        | Cys  | Ala   | Leu      | Met    |
| 7233 |      | 210  |       | 1              |             |        | 215      | •      |     |      | -    | 220        | -    |       |          |        |
| 7234 | Len  |      | Glu   | His            | Gly         | Thr    | Asp      | Pro    | Asn | Ile  | Pro  | Asp        | Glu  | Tyr   | Gly      | Asn    |
| 7235 | 225  |      |       |                | 1           | 230    |          |        |     |      | 235  |            |      | •     | -        | 240    |
| 7236 |      | Thr  | T.eu  | His            | Tyr         |        | TIE      | Tvr    | Asn | Glu  |      | Lvs        | Len  | Met   | Ala      | Lvs    |
| 7237 | 1111 | 1111 | DCu   | 1110           | 245         | *****  | 110      | - 7 -  |     | 250  | 1.05 | <b>L</b> 2 |      |       | 255      | -2-    |
| 7238 | 212  | T OU | T 011 | LOU            | Tyr         | C1 17  | λla      | Acn    | Tlo |      | Sor  | T.ve       | Δen  | Lvc   |          | Glv    |
|      | ALd  | rea  | neu   | 260            | TAT         | GLY    | ALG      | v2b    | 265 | Gru  | SCI  | пуз        | 7311 | 270   | 1113     | OLI    |
| 7239 | ·    | m\   | D===  |                | Leu         | T 0.11 | C1       | 17 - 7 |     | C1., | Cln  | Tvc        | Cln  |       | 17 a 1   | 17 a 1 |
| 7240 | Leu  | THE  |       | Leu            | Leu         | reu    | GIY      | 280    | птэ | GIU  | GIII | пåз        | 285  | GIII  | Val      | Val    |
| 7241 | _    |      | 275   | ×1.            |             |        | <b>-</b> |        | 3   | T    | »    | 21.        |      | * ~ ~ | 7. 20.00 | Mer se |
| 7242 | Lys  |      | Leu   | ire            | Lys         | rās    |          | АТА    | Asn | Leu  | ASII |            | rea  | ASP   | ALG      | TYL    |
| 7243 |      | 290  |       |                | _           |        | 295      |        | 1   | ~    |      | 300        | 0    |       | C        | T1 -   |
| 7244 |      | Arg  | Thr   | Ala            | Leu         |        | Leu      | ата    | vaı | Cys  |      | GIA        | ser  | Ala   | ser      |        |
| 7245 | 305  |      |       |                |             | 310    |          |        | _   |      | 315  | _          | _    |       | _        | 320    |
| 7246 | Val  | Ser  | Leu   | Leu            | Leu         | Glu    | GIn      | Asn    | 11e |      | Val  | Ser        | Ser  | GIn   |          | ren    |
| 7247 |      |      |       |                | 325         |        |          |        |     | 330  |      |            |      |       | 335      |        |
| 7248 | Ser  | Gly  | Gln   |                | Ala         | Arg    | Glu      | Tyr    |     | Val  | Ser  | Ser        | His  |       | His      | Val    |
| 7249 |      |      |       | 340            |             |        |          |        | 345 |      |      |            |      | 350   |          |        |
| 7250 | Ile  | Cys  | Gln   | Leu            | Leu         | Ser    | Asp      |        | Lys | Glu  | Lys  | Gln        |      | Leu   | Lys      | Ile    |
| 7251 |      |      | 355   |                |             |        |          | 360    |     |      |      |            | 365  |       |          |        |
| 7252 | Ser  | Ser  | Glu   | Asn            | Ser         | Asn    | Pro      | Glu    | Asn | Val  | Ser  |            | Thr  | Arg   | Asn      | Lys    |
| 7253 |      | 370  |       |                |             |        | 375      |        |     |      |      | 380        |      |       |          |        |
| 7254 | Pro  | Arg  | Thr   | His            | Met         | Val    | Val      | Glu    | Va1 | Asp  |      | Met        | Pro  | Ala   | Ala      |        |
| 7255 | 385  |      |       |                |             | 390    |          |        |     |      | 395  |            |      |       |          | 400    |
| 7256 | ser  | Va1  | Lys   | Lys            | Pro         | Phe    | Gly      | Leu    | Arg | Ser  | Lys  | Met        | Gly  | Lys   |          | Cys    |
| 7257 |      |      |       |                | 405         |        |          |        |     | 410  |      |            |      |       | 415      |        |
| 7258 | Cys  | Arg  | Cys   | Phe            | Pro         | Cys    | Cys      | Arg    | Glu | Ser  | Gly  | Lys        | Ser  | Asn   | Val      | Gly    |
| 7259 |      |      |       | 420            |             |        |          |        | 425 |      |      |            |      | 430   |          |        |
| 7260 | Thr  | Ser  | Gly   | Asp            | His         | Asp    | Asp      | Ser    | Ala | Met  | Lys  | Thr        | Leu  | Arg   | Ser      | Lys    |
| 7261 |      |      | 435   |                |             |        |          | 440    |     |      |      |            | 445  |       |          |        |
| 7262 | Met  | Gly  | Lys   | Trp            | Cys         | Arg    | His      | Cys    | Phe | Pro  | Cys  | Cys        | Arg  | Gly   | ser      | Gly    |
| 7263 |      | 450  | -     | -              |             |        | 455      |        |     |      |      | 460        |      |       |          |        |
| 7264 | Lys  | Ser  | Asn   | Val            | Gly         | Ala    | Ser      | Gly    | Asp | Ӊis  | Asp  | Asp        | Ser  | Ala   | Met      | Lys    |
| 7265 | 465  |      |       |                | -           | 470    |          | -      | _   | •    | 475  |            |      |       |          | 480    |
| 7266 |      | Leu  | Arq   | Asn            | Lys         | Met    | Gly      | Lys    | Trp | Cys  | Cys  | His        | Cys  | Phe   | Pro      | Cys    |
| 7267 |      |      | ,     |                | 485         |        | •        | -      | -   | 490  | -    |            | _    |       | 495      |        |
| 7268 | Cys  | Ara  | Glv   | Ser            | Gly         | Lys    | Ser      | Lys    | Val | Gly  | Ala  | Trp        | Gly  | Asp   | Tyr      | Asp    |
| 7269 | -, - | 9    | 2     | 500            | -           | •      |          | •      | 505 | •    |      | -          | -    | 510   | -        | -      |
| 7270 | Asp  | Ser  | Ala   |                | Met         | Glu    | Pro      | Ara    | Tyr | His  | Val  | Arq        | Gly  | Glu   | Asp      | Leu    |
| 7271 | 1    |      | 515   |                |             | _      | -        | 520    | •   |      |      | -          | 525  |       | -        |        |
|      |      |      |       |                |             |        |          |        |     |      |      |            | _    |       |          |        |

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Input Set : A:\42711cll.app
Output Set: N:\CRF3\07252000\I483672A.raw

| 7272<br>7273 | Asp  | Lys<br>530 | Leu  | His       | Arg        | Ala  | Ala<br>535 | Trp  | Trp         | Gly | Lys       | Val<br>540                              | Pro   | Arg  | Lys   | Asp        |
|--------------|------|------------|------|-----------|------------|------|------------|------|-------------|-----|-----------|---|-------|------|-------|------------|
| 7274         | Leu  | Ile        | Val  | Met       | Leu        | Arg  | Asp        | Thr  | Asp         | Val | Asn       | Lys                                     | Lys   | Asp  | Lys   | Gln        |
| 7275         | 545  |            |      |           |            | 550  | -          |      | -           |     | 555       | -                                       | -     | -    | -     | 560        |
| 7276         | Lys  | Arg        | Thr  | Ala       | Leu        | His  | Leu        | Ala  | Ser         | Ala | Asn       | Gly                                     | Asn   | Ser  | Glu   | Val        |
| 7277         | -    | _          |      |           | 565        |      |            |      |             | 570 |           | _                                       |       |      | 575   |            |
| 7278         | Val  | Lys        | Leu  | Leu       | Leu        | Asp  | Arg        | Arg  | Cys         | Gln | Leu       | Asn                                     | Val   | Leu  | Asp   | Asn        |
| 7279         |      | _          |      | 580       |            |      |            |      | 585         |     |           |   |       | 590  |       |            |
| 7280         | Lys  | Lys        | Arg  | Thr       | Ala        | Leu  | Ile        | Lys  | Ala         | Val | Gln       | Cys                                     | Gln   | Glu  | Asp   | Glu        |
| 7281         |      |            | 595  |           |            |      |            | 600  |             |     |           |   | 605   |      |       |            |
| 7282         | Cys  | Ala        | Leu  | Met       | Leu        | Leu  | Glu        | His  | Gly         | Thr | Asp       |   | Asn   | Ile  | Pro   | Asp        |
| 7283         |      | 610        |      |           |            |      | 615        |      |             |     |           | 620                                     |       |      |       |            |
| 7284         |      | Tyr        | Gly  | Asn       | Thr        |      | Leu        | His  | Tyr         | Ala |           | Tyr                                     | Asn   | Glu  | Asp   |            |
| 7285         | 625  |            |      |           |            | 630  |            |      |             |     | 635       |   |       |      | _     | 640        |
| 7286         | Leu  | Met        | Ala  | Lys       |            | Leu  | Leu        | Leu  | Tyr         |     | Ala       | Asp                                     | Ile   | Glu  | Ser   | Lys        |
| 7287         |      |            |      |           | 645        |      |            |      |             | 650 |           |   |       |      | 655   | _          |
| 7288         | Asn  | Lys        | His  | _         | Leu        | Thr  | Pro        | Leu  |             | Leu | Gly       | Val                                     | His   |      | Gln   | Lys        |
| 7289         |      |            |      | 660       | _          |      | _          |      | 665         | _   | _         |   |       | 670  |       |            |
| 7290         | GIn  | Gin        |      | Val       | Lys        | Phe  | Leu        |      | rys         | Lys | ьуs       | АТа                                     |       | Leu  | Asn   | ALA        |
| 7291         |      |            | 675  |           | <b>a</b> 1 |      | m1         | 680  | ¥           | T1. | T         | 21-                                     | 685   | O    | C     | <b>a</b> 1 |
| 7292         | ьеи  |            | Arg  | TAL       | GIA        | arg  | 695        | Ата  | ren         | ire | ьеи       | 700                                     | val   | Cys  | Суѕ   | GTÄ        |
| 7293         | C    | 690        |      | т1.       | tra 1      | Con  |            | t ou | Tau         | C1  | Cln       |   | т1.   | 700  | Val   | cor        |
| 7294<br>7295 | 705  | Ald        | ser  | тте       | val        | 710  | ьец        | neu  | пеп         | GIU | 715       | ASII                                    | 116   | YPh  | Val   | 720        |
| 7295         |      | Cln        | λen  | Len       | Ser        |      | Gln        | Thr  | Δla         | Δτα |           | туг                                     | Δla   | Va1  | Ser   |            |
| 7297         | 261  | GIII       | дэр  | пси       | 725        | GLY  | 0111       | 1111 | ma          | 730 | OIU       | -1-                                     | 1114  | , 41 | 735   | DCI        |
| 7298         | His  | His        | His  | Va1       |            | Cvs  | Gln        | Leu  | Len         |     | Asp       | Tvr                                     | Lvs   | Glu  | Lys   | Gln        |
| 7299         | 1110 |            |      | 740       |            | 0,10 | V-1.       | 200  | 745         |     |           | -1-                                     | -1-   | 750  | -1-   | •          |
| 7300         | Met  | Leu        | Lvs  |           | Ser        | Ser  | Glu        | Asn  |             | Asn | Pro       | Glu                                     | Gln   |      | Leu   | Lys        |
| 7301         |      |            | 755  |           |            |      |            | 760  |             |     |           |   | 765   | -    |       | •          |
| 7302         | Leu  | Thr        | Ser  | G1u       | Glu        | Glu  | Ser        | Gln  | Arq         | Phe | Lys       | Gly                                     | Ser   | Glu  | Asn   | Ser        |
| 7303         |      | 770        |      |           |            |      | 775        |      | _           |     | _         | 780                                     |       |      |       |            |
| 7304         | Gln  | Pro        | Glu  | Lys       | Met        | Ser  | Gln        | Glu  | ${\tt Pro}$ | Glu | Ile       | Asn                                     | Lys   | Asp  | Gly   | Asp        |
| 7305         | 785  |            |      |           |            | 790  |            |      |             |     | 795       |   |       |      |       | 800        |
| 7306         | Arg  | Glu        | Val  | Glu       |            | Glu  | Met        | Lys  | Lys         |     | Glu       | Ser                                     | Asn   | Asn  | Val   | Gly        |
| 7307         |      |            |      |           | 805        |      |            |      |             | 810 |           |   |       |      | 815   |            |
| 7308         | Leu  | Leu        | Glu  |           | Leu        | Thr  | Asn        | Gly  |             | Thr | Ala       | Gly                                     | Asn   |      | Asp   | Asn        |
| 7309         |      |            |      | 820       |            |      |            |      | 825         |     | _         |   | _     | 830  |       |            |
| 7310         | Gly  | Leu        |      | Pro       | Gln        | Arg  | Lys        |      | Arg         | Thr | Pro       | GLu                                     |       | GIn  | Gln   | Phe        |
| 7311         | _    | _          | 835  |           |            | ~ 1  |            | 840  |             |     | <b>-1</b> |   | 845   |      | **. 1 | a          |
| 7312         | Pro  | •          | Asn  | Glu       | Ser        | Glu  |            | Tyr  | His         | Arg | ile       | _                                       | GIU   | Leu  | Val   | ser        |
| 7313         |      | 850        | Ŧ    | <b>~1</b> | T          | G1.  | 855        | D    | *           | m   | C         | 860                                     | C1    | 3.00 | Com   | 3.00       |
| 7314         | -    | ıyr        | тАЗ  | GIU       | пАЗ        | 870  | met        | 51.0 | υλg         | TYT | 875       | ser                                     | GIU   | ASI  | Ser   | 880        |
| 7315<br>7316 | 865  | Cla        | Clr  | λan       | Lon        |      | Len        | Thr  | Cor         | Glu |           | Gliv                                    | Sor   | Clr  | Arg   |            |
| 7310         | 510  | GIU        | 9711 | พรษ       | 885        | пÃа  | nen        | 1111 | 261         | 890 | ard       | GLU                                     | SCT   | Grii | 895   | ne a       |
| 7318         | Glu  | G1v        | Sar  | Glu       |            | Glv  | Glr        | Pro  | Glu         |     | Glu       | Agn                                     | Phe   | Met  | Ala   | Tle        |
| 7319         | GIU  | G±Y        | Jer  | 900       | non        | STY  | GTII       | 0    | 905         | u   | JIU       | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | . 110 | 910  | .1+u  |            |
| 7320         | Glu  | Glu        | Met  |           | Lvs        | His  | Glv        | Ser  |             | His | Va]       | Glv                                     | Phe   |      | Glu   | Asn        |
|              | J-4  |            |      | -1-       |            |      | 1          |      |             |     |           | 2                                       |       |      |       |            |

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PATENT APPLICATION: US/09/483,672A TIME: 14:32:14

Input Set : A:\42711c11.app

Output Set: N:\CRF3\07252000\I483672A.raw

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915
                                                                  920
        7321
                  Leu Thr Asn Gly Ala Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro 930 940

Pro Arg Lys Ser Arg Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu 945 950 950 960
        7322
        7323
        7324
        7325
                 Asn Glu Glu Tyr His Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe 965 970 975

Cys Glu Glu Gln Asn Thr Gly Ile Leu His Asp Glu Ile Leu Ile His 980 985 990

Glu Glu Lys Gln Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser 995 1000 1005
        7326
        7327
        7328
        7329
        7330
        7331
                  Leu Ser Cys Lys Lys Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu
1010 1015 1020
        7332
        7333
                  Arg Glu Glu Ile Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His 1025 1030 1035 1035 1040 Acg Cln Ser Gln Leu Pro Arg Thr His Met Val Val Glu Val Asp Ser Met 1045 1050 1055
        7334
E--> 7335
        7336
        7337
                  Pro Ala Ala Ser Ser Val Lys Lys Pro Phe Gly Leu Arg Ser Lys Met

1060
1065
1070
Gly Lys Trp Cys Cys Arg Cys Phe Pro Cys Cys Arg Glu Ser Gly Lys
1075
1080
1085
Ser Asn Val Gly Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr
1090
1095
1100
Leu Arg Ser Lys Met Gly Lys Trp Cys Arg His Cys Phe Pro Cys Cys
1105
Arg Glv Ser Gly Lys Ser Asn Val Glv Ala Ser Glv Asp His Asp Asp
        7338
        7339
        7340
        7341
         7342
        7343
        7344
E--> 7345
                  Arg Gly Ser Gly Lys Ser Asn Val Gly Ala Ser Gly Asp His Asp Asp 1125 1130 1135
        7346
        7347
                  Ser Ala Met Lys Thr Leu Arg Asn Lys Met Gly Lys Trp Cys Cys His
1140
1145
1150

Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Lys Val Gly Ala Trp
1155
1160
1165
        7348
        7349
         7350
         7351
                  Gly Asp Tyr Asp Asp Ser Ala Phe Met Glu Pro Arg Tyr His Val Arg
1170 1175 1180
        7352
        7353
                  Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys (120) /200
        7354
E--> 7355
        7356
                  Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys 1205 1210 1215
        7357
                  Lys Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly 1220 1225 1230
         7358
         7359
                  Asn Ser Glu Val Val Lys Leu Leu Leu Asp Arg Arg Cys Gln Leu Asn 1235 1240 1245
         7360
                  Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Ile Lys Ala Val Gln Cys 1250 1255 1260
         7362
        7363
                  Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro 1265 1270 1275
        7364
E--> 7365
                  Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Ile Tyr
1285 1290 1295
        7366
                  Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp
         7368
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Input Set : A:\42711c11.app
Output Set: N:\CRF3\07252000\1483672A.raw

```
7370 Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Gly Val
                       1315
                                          1320
                                                                           1325
             His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala
1330 1335 1340
      7372
      7373
             Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala
1345 1350 1355 136

Val Cys Cys Gly Ser Ala Ser Ile Val Ser Leu Leu Leu Glu Gln Aer
1365 1370 1375
      7374
E--> 7375
      7376
      7377
             Ile Asp Val Ser Ser Gln Asp Leu Ser Gly Gln Thr Ala Arg Glu Tyr
1380 1385 1390
      7378
      7379
             Ala Val Ser Ser His His His Val Ile Cys Gln Leu Leu Ser Asp Tyr 1395 1400 1405
      7380
      7381
             Lys Glu Lys Gln Met Leu Lys Ile Ser Ser Glu Asn Ser Asn Pro Glu 1410 1415 1420
      7382
      7383
             Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Phe Lys Gly
1425
1430
1435
Ser Glu Asn Ser Gln Pro Glu Lys Met Ser Gln Glu Pro Glu Ile Asn
1445
1450
1450
1455
      7384
E--> 7385
      7387
             Lys Asp Gly Asp Arg Glu Val Glu Glu Glu Met Lys Lys His Glu Ser
1460 1465 1470
      7388
      7389
             Asn Asn Val Gly Leu Leu Glu Asn Leu Thr Asn Gly Val Thr Ala Gly 1475 1480 1485
      7391
             Asn Gly Asp Asn Gly Leu Ile Pro Gln Arg Lys Ser Arg Thr Pro Glu
1490 1495 1500
      7392
      7393
              Asn Gln Gln Phe Pro Asp Asn Glu Ser Glu Glu Tyr His Arg Ile Cys
1505 1510 1515
      7394
E--> 7395
             Glu Leu Val Ser Asp Tyr Lys Glu Lys Gln Met Pro Lys Tyr Ser Ser
1525 1530 1535
      7396
      7397
              Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu 1540 1545 1550
      7399
             Ser Gln Arg Leu Glu Gly Ser Glu Asn Gly Gln Pro Glu Lys Arg Ser
1555 1560 1565
      7401
             Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Leu Glu Asn Phe
1570 1575 1580
      7402
      7403
             Met Ala Ile Glu Glu Met Lys Lys His Gly Ser Thr His Val Gly Phe
1585 1590 1595
      7404
E--> 7405
             Pro Glu Asn Leu Thr Asn Gly Ala Thr Ala Gly Asn Gly Asp Asp Gly
1605 1610 1615
      7407
             Leu Ile Pro Pro Arg Lys Ser Arg Thr Pro Glu Ser Gln Gln Phe Pro 1620 1625 1630
      7408
      7409
             Asp Thr Glu Asn Glu Glu Tyr His Ser Asp Glu Gln Asn Asp Thr Gln 1635 1640 1645
      7410
      7411
             Lys Gln Phe Cys Glu Glu Gln Asn Thr Gly Ile Leu His Asp Glu Ile
1650 1655 1660
      7412
      7413
            Leu Ile His Glu Glu Lys Gln Ile Glu Val Val Glu Lys Met Asn 8er 1665 1670 1675 1685 1690 1695
      7414
      7415
      7416
      7418 Ser Thr Leu Arg Glu Glu Ile Ala Met Leu Arg Leu Glu Leu Asp Thr
```

sane Lyper Jenn RAW SEQUENCE LISTING DATE: 07/25/2000 PATENT APPLICATION: US/09/483,672A TIME: 14:32:14

Input Set : A:\42711cll.app

Output Set: N:\CRF3\07252000\1483672A.raw

```
7419
                                                                                  1710
                             1700
                                                        1705
      7420 Met Lys His Gln Ser Gln Leu
7421 1715
       10356 <210> SEQ ID NO: 525
       10357 <211> LENGTH: 254
       10358 <212> TYPE: PRT
       10359 <213> ORGANISM: Homo sapien
       10361 <400> SEQUENCE: 525
       10362 Met Ala Thr Ala Gly Asn Pro Trp Gly Trp Phe Leu Gly Tyr Leu Ile 10363 1 5 10 15
       10364 Leu Gly Val Ala Gly Ser Leu Val Ser Gly Ser Cys Ser Gln Ile Ile
10365 20 25 30
       10366 Asn Gly Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu 10367 35 40 45
       10368 Val Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln
10369 50 55 60
       10370 Trp Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly
10371 65 70 75 80
       10372 Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met
10373 85 90 95
       10374 Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu
10375 100 105 110
       10376 Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu
10377 115 120 125
       10378 Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala
10379 130 135 140
       10380 Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg
10381 145 150 155 160
      10382 Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu 10383 165 170 175
       10384 Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys 10385 180 185 190
       10386 Ala Gly Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly 10387 195 200 205
       10388 Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly 10389 210 215 220
10389 210
10390 Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu
10391 225 230 235 240
10392 Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
E--> 10393 245 250
```

7/25/00

VERIFICATION SUMMARY DATE: 07/25/2000
PATENT APPLICATION: US/09/483,672A TIME: 14:32:16

Input Set : A:\42711cll.app

Output Set: N:\CRF3\07252000\I483672A.raw

```
L:23 M:270 C: Current Application Number differs, Wrong Format
L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:51 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:52 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:53 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:54 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:76 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:77 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:78 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:80 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:97 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:105 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:123 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:126 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:127 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:128 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:131 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:155 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:156 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:157 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:181 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:182 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:183 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
                            "n" or "Xaa" used, for SEQ ID#:7
"n" or "Xaa" used, for SEQ ID#:7
L:207 M:341 W: (46)
L:208 M:341 W: (46)
                            "n" or "Xaa" used, for SEQ ID#:7
"n" or "Xaa" used, for SEQ ID#:8
L:209 M:341 W: (46)
L:226 M:341 W: (46)
                            "n" or "Xaa" used, for SEQ ID#:8
"n" or "Xaa" used, for SEQ ID#:8
L:227 M:341 W: (46)
L:228 M:341 W: (46)
L:229 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
                            "n" or "Xaa" used, for SEQ ID#:8
L:230 M:341 W: (46)
L:231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:234 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
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VERIFICATION SUMMARYDATE: 07/25/2000PATENT APPLICATION:US/09/483,672ATIME: 14:32:16

Input Set : A:\42711cll.app

Output Set: N:\CRF3\07252000\I483672A.raw

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L:235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:249 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:698 M:283 W: Missing Blank Line separator, <210> field identifier
L:1467 M:283 W: Missing Blank Line separator, <400> field identifier
L:7335 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:378
M:332 Repeated in SeqNo=378
L:10018 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID\#:502 L:10018 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID\#:502
L:10018 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502
L:10018 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502
L:10018 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:502
L:10019 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:502
L:10019 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:502
L:10019 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502
L:10019 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502
M:340 Repeated in SeqNo=502
L:10020 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:502
L:10020 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:502
L:10020 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502
L:10020 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502
L:10021 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:502
L:10021 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:502
L:10021 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502
L:10021 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502
L:10023 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:502
L:10023 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:502
L:10023 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:502
L:10023 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:502
L:10031 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503
L:10031 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503
L:10031 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503
L:10031 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503
L:10031 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:503
L:10032 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503
L:10032 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503
L:10032 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503
L:10032 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503
M:340 Repeated in SeqNo=503
L:10033 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503
L:10033 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503
L:10033 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503
L:10033 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503
L:10035 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503
L:10035 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503
L:10035 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503
L:10035 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503
L:10036 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503
L:10036 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503
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VERIFICATION SUMMARY

DATE: 07/25/2000

PATENT APPLICATION: US/09/483,672A

TIME: 14:32:16

Input Set : A:\42711cll.app

Output Set: N:\CRF3\07252000\1483672A.raw

L:10036 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503 L:10036 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503 L:10037 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:503 L:10037 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503 L:10037 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:503 L:10037 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:503 L:10037 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:503 L:10107 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:508 L:10107 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:508 L:10107 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:508 L:10107 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:508 L:10107 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:508 L:10107 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:508 L:10393 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:525